SLOVENSKI STANDARD
SIST EN 750:1996 + A1:1998

01-september-1998

Nadomeġļa:
SIST EN 750:1996
SIST EN 750:1996

Oprema ġportnih igriġļ - Vrata za hokej na ledu - Zahteve in preskusne metode, ki vkljuļ ujejo varnost

Playing field equipment - Hockey goals - Functional and safety requirements, test methods (including amendment 1:1998)

Spielfeldgeräte - Hockeytore - Funktionelle und sicherheitstechnische Anforderungen, Prüverfahren (einschließlich Änderung 1:1998)

Equipement de jeux - Buts de hockey - Exigences fonctionnelles et de sécurité, méthodes d'essai (amendement 1:1998, inclus)

Ta slovenski standard je istoveten z: **EN 750:1995 + A1:1998**

ICS:

97.220.30	Oprema za dvoranske športe	Indoor sports equipment
97.220.40	Oprema za športe na prostem in vodne športe	Outdoor and water sports equipment

SIST EN 750:1996 + A1:1998 **en**

EUROPEAN STANDARD
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EN 750:1995+A1

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ICS 97.220.40

Descriptors: sports, hockey, sports equipment, goals, sports nets, specififfication, designation, dimensions, safety, tests, marking

English version

Playing field equipment - Hockey goals - Functional and safety requirements, test methods (including amendment 1:1998)

Equipement de jeux - Buts de hockey - Exigences fonctionnelles et de sécurité, méthodes d'essai (amendement 1:1998, inclus)

Spielfeldgeräte - Hockeytore - Funktionelle und sicherheitstechnische Anforderungen, Prüfverfahren (einschließlich Änderung 1:1998)

This amendment A1 modifies the European Standard EN 750:1995; it was approved by CEN on 23 March 1998.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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Foreword

This Amendment EN 750:1995+A1:1998 to EN 750:1995 has been prepared by Technical Committee CEN/TC 136 "Sports, playground and other recreational equipment", the secretariat of which is held by DIN.

This Amendment to the European Standard EN 750:1995 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 1998, and conflicting national standards shall be withdrawn at the latest by October 1998.

This European Standard replaces EN 750:1995.

The amendment 1 to EN 750:1995 added the requirement and test method regarding strength in EN 748 and the additional requirement regarding steel cup hooks have been implemented in this standard as well.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies the functional requirements for 2 types (see clause 3) and the safety requirements (see clause 4) for hockey goals.

This standard is applicable to goals for training and competition intended to be used for outdoor hockey. Goals intended to be used for indoor hockey see EN 749.

2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

EN 749
Playing field equipment – Handball goals – Functional and safety requirements, test methods

prEN 1176-1
Playground equipment – Part 1: General safety requirements and test methods

ISO 2062
Textiles – Yarns from packages – Determination of single-end breaking force and elongation at break

ISO 2307
Ropes – Determination of certain physical and mechanical properties

3 Requirements

3.1 Classification

Hockey goals shall be classified by the design (types) as shown in table 1.

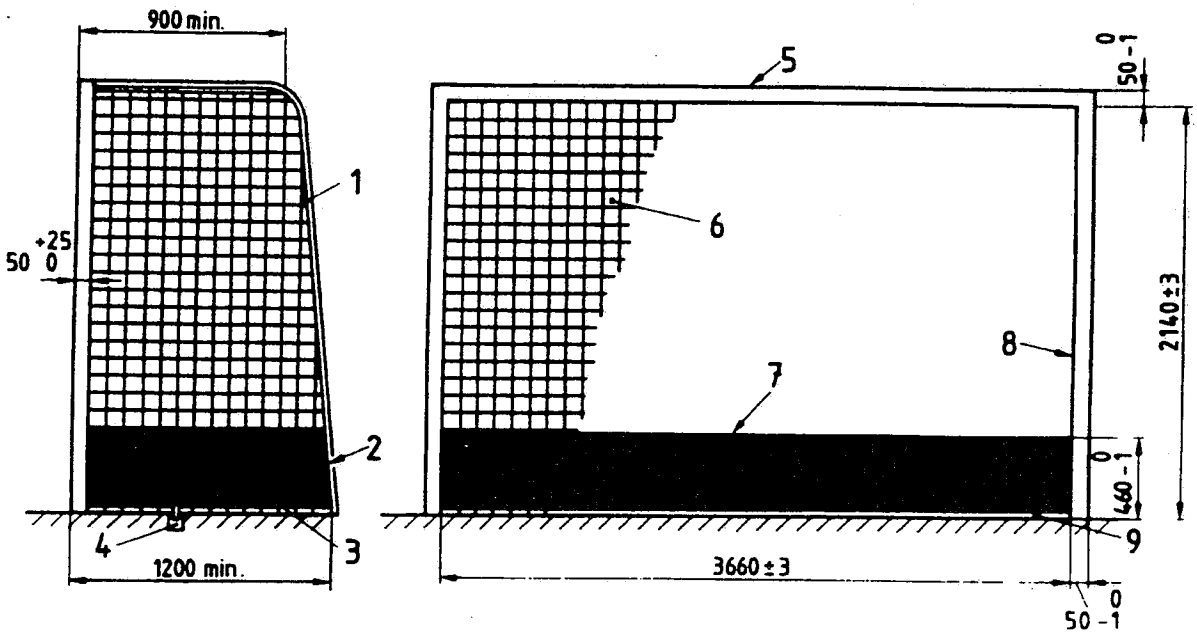
Table 1: Types

Type	Description
1	Hockey goal with ground sockets
2	Freestanding hockey goal

3.2 Dimensions

Hockey goals shall comply with the dimensions shown in figure 1.

Dimensions in millimetres



1 Net supporting brackets
2 Side backboard
3 Bottom side bar
4 Example of anti-tilting device
5 Crossbar
6 Net
7 Rear backboard
8 Upright
9 Bottom back bar

Figure 1: Hockey goal type 2

One hockey goal consists of:

– the goal frame (2 uprights and 1 crossbar) including net fixings (and ground sockets for type 1);

– the backboards (1 rear backboard, 2 side backboards);

– 2 net supporting brackets;

– 2 bottom side bars;

– anti-tilting devices (at least one at each side) (for type 2);

– 1 bottom back bar;

– 1 net.

3.3 Material

The goal frame and the backboards may be made of timber, steel, light metal or plastic material, provided the requirements of this standard are fulfilled.

Net supporting brackets and bottom side and back bars shall be made of light metal and/or steel protected against corrosion (e.g. hot galvanized, powder coated or painted).

NOTE: Synthetic net yarn and net head lines should contain a minimum of 2,5 % UV-stabilizer.

3.4 Design

3.4.1 Goal frame

The construction shall be sufficiently secure to withstand the stresses occuring during a game and during transport.

The latter requirement is fulfilled when the corner section of the goal frame is not deformed or damaged after testing according to 5.2.

The goal frame shall be in white colour.

3.4.2 Nets

3.4.2.1 Dimensions

The net dimensions shall comply with table 2.

The net meshes shall be square with filaments running horizontally and vertically.

Table 2: Net dimensions

Dimensions in millimetres

length	heigth	depth		width of mesh	diameter of yarn
		top	ground		
min.	min.	min.	min.	max.	min.[1)]
3 660	2 140	900	1 200	45	2
[1)] The diameter is minimum to minimize the risk of cutting.					

3.4.2.2 Physical properties

Nets shall comply with tables 3 and 4, as appropriate.

Table 3: Breaking forces of net yarn

Class	N	Test method
	min.	
A	1 500	ISO 2062
B	900	
C	660	

Table 4: Rope breaking forces of net head line

Class	N min.	Test method
Z	7 000	ISO 2307
Y	3 000	

3.4.2.3 Net fixing

The net shall be so fixed that the ball will not pass between the goal frame and the net.

3.4.3 Ground sockets

For the depth of the ground socket and the dimensions of the concrete block see EN 749.

When using sockets out of doors, they shall have a drainage hole.

4 Safety requirements

4.1 General

Corners and edges which may cause injuries, shall be rounded with a radius of at least 3 mm.

4.2 Goal frame

The edges of the goal frame shall be rounded to a radius of (3 ± 1) mm.

4.3 Strength

When tested in accordance with 5.2, the crossbar shall not fracture or collapse or show permanent deformation greater than 10 mm.

4.4 Stability

When tested in accordance with 5.3, the goal shall not tilt nor slide.

4.5 Net supporting brackets

The connection of net supporting brackets shall not protrude outside the goal frame.

4.6 Net fixings

The fixation of the net to the goal frame and the brackets/bars shall be designed in such a way that the player cannot be hurt or parts of him cannot be caught.

This requirement is fulfilled if e.g. openings do not exceed 5 mm. Steel cup hooks shall not be used. If spring hooks are used as means of fixation or for the end of a rope, they shall have screw caps.

4.7 Entrapment

Regarding entrapment see prEN 1176-1.

5 Test methods

5.1 General

If not otherwise specified in the following the requirements of clauses 3 and 4 are tested by measuring, visual inspection or practical test.

Execute the test after conditioning the goal for a minimum of 3 h at a test temperature of (23 ± 2) °C.

5.2 Determination of strength

Apply a vertical force of 1 800 N at the centre of the crossbar for 1 min $^{+10}_{0}$ s.

Note any fracture or other damage to the goal.

Remove the force and measure any permanent deformation 30 min $^{+30}_{0}$ s after removal of the force.

5.3 Determination of stability

Install the goal in its normal position of use. Apply a horizontal force (F) of 1 100 N at the top of the centre of the crossbar for 1 min $^{+10}_{0}$ s by means of a rope of 3 000 mm length (see figure 2). Note any falling over or sliding.

6 Assembly instructions

The manufacturer shall provide written instructions for assembly and installation.

It shall be pointed out in the assembly instructions that any goals that are not being used at the moment should be secured against overturning.